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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,697	03/16/2004	Yong Cheol Park	0465-1157P	1773

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EXAMINER	
DANIELSEN, NATHAN ANDREW	

ART UNIT	PAPER NUMBER
2627	

NOTIFICATION DATE	DELIVERY MODE
08/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/800,697	PARK ET AL.	
	Examiner	Art Unit	
	Nathan Danielsen	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4,7-21,24-27,29-38,40-44 and 46-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4,7-21,24-27,29-38,40-44 and 46-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. 09/345,380.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/07/07, 05/27/08, & 07/21/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 3, 4, 7-21, 24-27, 29-38, 40-44, and 46-49 are pending. Claim 2 was canceled in applicant's amendment filed 15 September 2005. Claims 5, 6, 22, and 23 were canceled in applicant's amendment filed 29 March 2007. Claims 24-50 were added in applicant's amendment filed 04 September 2007, of which claims 28, 39, and 50 were canceled in applicant's amendment filed 29 October 2007. Claim 45 was canceled in applicant's amendment filed

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Although this application is a divisional application filed in response to a restriction requirement in US parent application 09/345380, the double patenting rejections below are

deemed to be proper because applicant's amendments have caused the scope of the claims to correspond to the scope of the claims in each of US Patents 7,206,267 and 7,333,407 and US Patent applications 11/368,655 and 10/899,089, which scope corresponds to the scope of non-elected invention II in US parent application 09/345380 (see page 2 of the Office Action mailed 20 September 2002).

3. Claims 1, 3, 4, 7-21, 24-27, 29-38, 40-44, and 46-49 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of US Patent 7,206,267 in view of Gotoh et al (US Patent 6,292,625; hereinafter Gotoh) and Krakirian (US Patent 5,504,868).

Regarding claims 1, 4, 7-10, 12-16, 18, 20, 21, 24, 26, 27, 29, 33-35, 37, 38, 40-44, and 46-49, US Patent 7,206,267 claims everything claimed, except the details of the write command.

In the same field of endeavor, Krakirian discloses the details of the write command except the specific write type information (figures 2D and 12A and col. 14 line 51 through col. 15, line 9e).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the claims of US Patent 7,206,267 with the teachings of Krakirian, for the purpose of sending a write command to a device connected to a host via a SCSI interface (col. 3, lines 32- 40).

In the same field of endeavor, Gotoh discloses where a single bit, or flag, is all that is required to be in the write command to enable an apparatus designed to receive the write command to determine how to process the received information (as is described in figure 5 and col. 9, line 59 through col. 12, line 4 of US Patent 4,308,935 to Deric),

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the claims of US Patent 7,206,267 with the teachings of Gotoh, for the purpose of continuously recording data (col. 1, lines 50-56 and col. 2, lines 9-16).

Regarding claims 3, 25, and 36, US Patent 7,206,267, in view of Gotoh and Krakirian, claims everything except identifying a number of defective blocks and updating a recording capacity.

In the same field of endeavor, Gotoh discloses where the method further comprises identifying a number of defective data blocks found during the real time recording (col. 14, line 61 through col. 15, line 9), in order for use in at least a next recording operation; and updating a remaining recording capacity of the recording medium based on the number of defective data blocks, after recording the data (suggested by col. 11, line 59 through col. 12, line 13; where knowing the address ranges of free areas will allow the apparatus to know how much free Space there is).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the claims of US Patent 7,206,267 with the teachings of Gotoh, for the purpose of continuously recording data (col. 1, lines 50-56 and col. 2, lines 9-16).

Regarding claims 17, 19, and 32, US Patent 7,206,267, in view of Gotoh and Krakirian, claims everything except where the write command further includes a write speed information to specify the recording speed of data to be recoded and where a linear replacement to the defective data block is performed when the data transfer speed is lower than the recording speed and real time processing is not required.

In the same field of endeavor, Gotoh discloses where the write command further includes a write speed information to specify the recording speed of data to be recoded (suggested by the decision boxes for steps A1 and A3 in figure 1; where the determination as to what type of data is to be recorded dictates whether the recording speed is real-time or non-real-time) and where a linear replacement to the defective data block is performed when the data transfer speed is lower than the recording speed and real time processing is not required (col. 9, lines 6-16; where it would be obvious to maximize the amount of data that can be stored on a recording medium by efficiently using the unrecorded/free areas of the recording medium, especially when there is sufficient processing time to perform a linear replacement, as is the case when transferring non-

real-time data from a host to a peripheral recording device (see also col. 4, line 46 through col. 5, line 6 of Krakirian)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the claims of US Patent 7,206,267 with the teachings of Gotoh, for the purpose of continuously recording data (col. 1, lines 50-56 and col. 2, lines 9-16).

4. Claims 1, 3, 4, 7-21, 24-27, 29-38, 40-44, and 46-49 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-31 of US Patent 7,333,407 in view of Gotoh et al (US Patent 6,292,625; hereinafter Gotoh) and Krakirian (US Patent 5,504,868).

Regarding claims 1, 4, 7-10, 12-16, 18, 20, 21, 24, 26, 27, 29, 33-35, 37, 38, 40-44, and 46-49, US Patent 7,333,407 claims everything claimed, except the details of the write command.

In the same field of endeavor, Krakirian discloses the details of the write command except the specific write type information (figures 2D and 12A and col. 14 line 51 through col. 15, line 9e).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the claims of US Patent 7,333,407 with the teachings of Krakirian, for the purpose of sending a write command to a device connected to a host via a SCSI interface (col. 3, lines 32- 40).

In the same field of endeavor, Gotoh discloses where a single bit, or flag, is all that is required to be in the write command to enable an apparatus designed to receive the write command to determine how to process the received information (as is described in figure 5 and col. 9, line 59 through col. 12, line 4 of US Patent 4,308,935 to Deric).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the claims of US Patent 7,333,407 with the teachings of Gotoh, for the purpose of continuously recording data (col. 1, lines 50-56 and col. 2, lines 9-16).

Regarding claims 3, 25, and 36, US Patent 7,333,407, in view of Gotoh and Krakirian, claims everything except updating a recording capacity.

In the same field of endeavor, Gotoh discloses where the method further comprises updating a remaining recording capacity of the recording medium based on the number of defective data blocks, after recording the data (suggested by col. 11, line 59 through col. 12, line 13; where knowing the address ranges of free areas will allow the apparatus to know how much free Space there is).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the claims of US Patent 7,333,407 with the teachings of Gotoh, for the purpose of continuously recording data (col. 1, lines 50-56 and col. 2, lines 9-16).

Regarding claims 17, 19, and 32, US Patent 7,333,407, in view of Gotoh and Krakirian, claims everything except where the write command further includes a write speed information to specify the recording speed of data to be recoded and where a linear replacement to the defective data block is performed when the data transfer speed is lower than the recording speed and real time processing is not required.

In the same field of endeavor, Gotoh discloses where the write command further includes a write speed information to specify the recording speed of data to be recoded (suggested by the decision boxes for steps A1 and A3 in figure 1; where the determination as to what type of data is to be recorded dictates whether the recording speed is real-time or non-real-time) and where a linear replacement to the defective data block is performed when the data transfer speed is lower than the recording speed and real time processing is not required (col. 9, lines 6-16; where it would be obvious to maximize the amount of data that can be stored on a recording medium by efficiently using the unrecorded/free areas of the recording medium, especially when there is sufficient processing time to perform a linear replacement, as is the case when transferring non-real-time data from a host to a peripheral recording device (see also col. 4, line 46 through col. 5, line 6 of Krakirian)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the claims of US Patent 7,333,407 with the teachings of Gotoh, for the purpose of continuously recording data (col. 1, lines 50-56 and col. 2, lines 9-16).

5. Claims 1, 3, 4, 7-21, 24-27, 29-38, 40-44, and 46-49 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 4 and 6-37 of copending Application No. 11/368,655 in view of Krakirian.

This is a provisional obviousness-type double patenting rejection.

Regarding claims 1, 3, 4, 7-21, 24-27, 29-38, 40-44, and 46-49, 11/368,655 claims everything claimed, except the details of the write command.

In the same field of endeavor, Krakirian discloses the details of the write command except the specific write type information (figures 2D and 12A and col. 14 line 51 through col. 15, line 9e).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the claims of 11/368,655 with the teachings of Krakirian, for the purpose of sending a write command to a device connected to a host via a SCSI interface (col. 3, lines 32- 40).

Response to Arguments

6. Applicant's arguments filed 27 May 2008, with respect to claims 1, 8, 10, 20, 29, 33, 40, and 46 have been fully considered and are persuasive. The rejections of 27 November 2007 have been withdrawn.

Allowable Subject Matter

7. Claims 1, 3, 4, 7-21, 24-27, 29-38, 40-44, and 46-49 would be allowable if rewritten or amended to overcome the double patenting rejections set forth in this Office Action, or upon the filing of a proper Terminal Disclaimer.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, either alone or in combination, fails to teach or fairly suggest the claimed invention including indication information indicating that the defective data block is not replaced with the spare area when the write type information indicates that the real time recording is required.

Closing Remarks/Comments

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Danielsen whose telephone number is (571)272-4248. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nathan Danielsen
08/01/2008

/William J. Klimowicz/
Primary Examiner, Art Unit 2627